Kevin D. Zuniga Cuellar

(802) 777-9758 | kevinzunigacuellar@gmail.com | LinkedIn | GitHub | Website

Education

The University of Vermont | Burlington, Vermont
Master in Mechanical Engineering Aug 2023
Thesis: Tools to measure dispersion descriptors from polymer nanocomposites
Bachelor of Science in Mechanical Engineering, Minor: Computer Science May 2020

Technical Skills

Programming Languages	JavaScript, TypeScript, Python, Go, C++
Technical Tools	AWS, Azure, Linux, Git, CI/CD, Testing, OOP, Machine Learning
Web Technologies	React, Vue, Solid, Next.js, CSS, Astro, Firebase, Supabase, WebAssembly
Server Technologies	Express, MySQL, Node, Docker, PostgreSQL, MongoDB, GraphQL

Relevant Experience

Astro Sep 2022 – Present
Open Source Maintainer II *Remote*

- Collaborated on the development of a meta-framework that utilizes the island architecture to significantly enhance website performance and improve user experience.
- Improved user experience and reduced troubleshooting by developing and reviewing product documentation, ensuring clarity and accessibility for both end-users and developers.
- Authored over 10 integration guides for CMS, deployment, and backend solutions, including Firebase, Supabase, Contentful, AWS, Storyblok, etc , facilitating seamless third-party application integrations.
- Resolved over 100 issues on GitHub, ensuring a responsive and helpful environment for our user base.

University of Vermont – College of Engineering Sep 2021 – Aug 2023
Graduate Research Assistant
Burlington, VT

- Developed a user-friendly interface enabling non-technical users to query a graph database effortlessly, eliminating the need for writing complex SPARQL queries.
- Led the migration of the codebase from Matlab to Python, resulting in a 20% boost in server performance.
- Developed a browser-based image segmentation tool using WebAssembly, reducing response times from 1 minute to an average of 300ms, enhancing real-time data processing and user experience.
- Analyzed image data to derive meaningful context and features, facilitating future explorations into data relationships and patterns for machine learning studies.

Amazon Feb 2021 – Sep 2021
Maintenance Technician II *Seattle, WA*

- Conducted routine preventive maintenance and effectively diagnosed and troubleshooted fulfillment center machinery, ensuring optimal operational conditions.
- Improved warehouse shipping efficiency by 5% through the development of a new preventive maintenance schedule and the standardization of diagnostic documentation.

Manantial Hotel Nov 2020 – Dec 2020
Frontend Engineer *Seattle, WA*

- Led the design and development of the company's website using React, improving website performance by 50% while reducing operational costs by 40% through the implementation of a serverless architecture in AWS.
- Significantly boosted organic search rankings for high-competition keywords in the hotels and hospitality sector, moving from page 5 to the top 3 positions, enhancing the hotel's online visibility.

University of Vermont - College of Engineering Dec 2016 – May 2020
Undergraduate Teaching Assistant *Burlington, VT*

- Collaborated with professors in the planning, assessment, and documentation of daily lessons and laboratory activities for courses including MATLAB, AutoCAD, SolidWorks, and Digital Control & Embedded Systems.
- Facilitated student learning by providing guidance and support in classroom activities, enabling a better understanding of complex technical subjects.

Personal Projects

Binarized - GitHub | Website
- A web application that utilizes WebAssembly to transform images into black and white directly in the browser.
- Technologies: TypeScript, React, WebAssembly

Px86 - GitHub
- A tool for translating Python code into x86 Assembly, facilitating efficient low-level programming.
- Technologies: Python, PyTest

Remark-code-title - GitHub | NPM
- A remark plugin written in TypeScript, that enhances markdown code blocks by adding customizable titles.
- +300 monthly downloads in NPM, +100 dependents

GIF Finder - GitHub | Website
- A React-based website designed to facilitate the search for GIFs.
- Technologies: React, Webpack

Youtube Comments Spam Labeler - Demo
- Created a machine learning model in Python to label spam in YouTube comments with 80% accuracy.
- Technologies: Python, pandas, scikit-learn

Co-author Generator - GitHub | Website
- A tool that extracts contributors from a GitHub pull request and generates their respective git co-author strings.
- Technologies: Solid, Astro

Anonymous Admirers
- A social media application for sharing missed connections around the University of Vermont campus.
- Technologies: Next.js, React, MySQL, Node.js.
- Awarded 3rd place in the UVM CS Fair 2021 - Advanced Web

Algowizardry - GitHub | Website
- A compilation of solutions to common technical interview problems tailored for software engineers.
- Technologies: Web Components, Astro, MDX

Open Source

Starlight - GitHub | Website
- Developed and contributed to Starlight, a documentation tool facilitating the creation of comprehensive documentation websites from markdown, mdx, or markdoc files.
- Language/Framework: TypeScript and Astro, +2.5k GitHub Starts, +7k weekly downloads in npm.
- Received a $250 community award in recognition of contributions to Starlight - Announcement

Contributions - GiHub Pull Requests
- Resolved CSS issues for various UI components, ensuring consistent visual presentation.
- Implemented a badge component for sidebar labeling, enhancing navigation and clarity.
- Rectified search functionality to exclude non-relevant markup, optimizing user search experiences.
- Added comprehensive documentation for remark/rehype features, aiding users in utilizing these elements.
- Addressed formatting issues in links based on configuration options, improving flexibility.
- Ensured alphabetical sorting between files and directories in the sidebar for logical arrangement.
- Included translation labels for different UI components, enhancing accessibility.
- Enhanced file tree generation accuracy for identical names within directories.
- Actively engaged in reviewing, discussing, and proposing new features with maintainers and users.

Certifications
- AWS Solutions Architect Associate
- Microsoft Azure Fundamentals